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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

MAR 29 1996

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )

Telephone Number Portability )  
Policies )

CC Docket No. 95-116

**COMMENTS**

MCI Telecommunications Corporation and MCImetro (collectively referred to as MCI) respectfully submit these comments in response to the Public Notice (DA 96-358), dated March 14, 1996, in which the Commission seeks comment on how passage of the "Telecommunications Act of 1996"<sup>1</sup> affects number portability issues raised in the Commission's July 1995 Notice of Proposed Rulemaking herein. For the reasons explained below, the new law fully empowers the Commission to make local number portability available at the earliest opportunity, thereby making possible the introduction of competitive forces into local markets.<sup>2</sup>

**MCI's Position And The New Law**

MCI had urged that the Commission assume an active role in establishing guidelines for the development of service

<sup>1</sup> Pub.L. 104-104, 110 Stat. 56 (1996). The new law was enacted on February 8, 1996.

<sup>2</sup> The new law seeks "to provide for a pro-competitive, de-regulatory national policy framework" designed to make available to all Americans advanced telecommunications and information technologies and services "by opening all telecommunications markets to competition." (Emphasis supplied.) See "Notice of Proposed Rulemaking," CC Docket No. 96-61, FCC 96-123, rel. March 25, 1996, at para. 1.

provider number portability, and the new law requires no less.<sup>3</sup> Local number portability, MCI showed, was essential to the development of competition among local service providers, both wireline and wireless, and it demonstrated that the Commission, state commissions, and industry participants as well, need to work co-operatively to assure the earliest possible availability of provider portability.<sup>4</sup> MCI also emphasized that the interests of number portability would best be served if the Commission were to adopt guidelines to assist the industry and state regulators in the development process.<sup>5</sup>

Substantively, MCI had advocated a solution that led to

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<sup>3</sup> Section 251(e) of the new law provides, in pertinent part, that the Commission has "exclusive jurisdiction" to deal with numbering issues, although it is empowered to delegate some or all of that authority "to State commissions or other entities." Although in earlier comments, MCI had recommended that states assume a lead role in number portability matters pursuant to Commission guidelines, the passage of time, coupled with the new law, dictate the need, going-forward, for Commission leadership in connection with number portability matters.

<sup>4</sup> The new law, at Section 252(e), acknowledges the important role that "State commissions and other entities" have in the process. That section expressly permits the Commission to share its plenary jurisdiction over numbering matters with others.

<sup>5</sup> The new law, at Section 252(b)(2), plainly establishes the leadership role of the Commission in terms of local number portability when it reposes in incumbent local carriers the duty to provide number portability "in accordance with requirements prescribed by the Commission." If there ever were any controversy over the Commission's plenary authority with respect to local number portability issues, this provision -- in combination with Section 251(e) -- finally puts it to rest.

adoption of the Location Routing Number (LRN) proposal,<sup>6</sup> and emphasized that provider-portability architecture and administration ought not to be allowed in any way to impede the development of competition.<sup>7</sup> The new law plainly speaks to this when it addresses the need for number availability "on an equitable basis" and, further, the imposition of costs "on a competitively neutral basis...."<sup>8</sup> Thus, the new law is fully consistent with MCI's position, as reflected in its previous submissions in this proceeding.

LRN Is The Only Approach Consistent With The New Law

The new law defines "number portability -- and, by

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<sup>6</sup> MCI originally advocated a two-phase approach involving Carrier Portability Code as the first phase, with LRN as the permanent solution. This in no way should be construed to mean that MCI does not fully support LRN as the appropriate solution for LNP.

<sup>7</sup> LRN is a single-number solution that assigns a network routing address on a per-switch basis rather than the per-line basis typically used. It is a means of routing the call through the network to the terminating switch using a 10-digit number in the format NPA-NXX-XXXX as currently used in network routing. It thus would preserve the NPA-NXX of the called party number. The first six digits would identify the local exchange end office serving the called party, and the last four would not be the same as in the dialed number, nor would they be the same number across all switches used in routing the call.

By relying on the first six digits currently used, this approach would minimize the impact on carriers' existing infrastructures, thus resulting in lower implementation costs. Switch modifications and signalling impacts would be minimal, and no changes would be needed for existing AIN 0.1 TCAP messages to accommodate LRN. This approach also has the advantage of minimizing the impact on NANP number resources since only one number per NXX is the LRN for that switch. Perhaps most important, LRN would allow full functionality to customers of ported numbers.

<sup>8</sup> See Section 251(e) at Subsections (1) and (2).

plain implication, "local number portability" or LNP -- as the "ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability or convenience when switching from one telecommunications carrier to another."<sup>9</sup> With this the case, this proceeding can serve well as the vehicle to achieve this crucial statutory objective and, given its commencement before the enactment of the new law, should encourage the industry to move toward a collegial and co-operative resolution of numbering issues.

Based upon industry efforts taken to date, as well as, significantly, recent and ongoing actions taken in several states,<sup>10</sup> the Commission should adopt LRN as the model for LNP. MCI is not alone in its strong preference for LRN as, indeed, a large number of carriers have indicated a similar preference.<sup>11</sup> It simply is the best approach because it not only allows for service provider portability, but also for location and service portability. Furthermore, because of

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<sup>9</sup> Section 3.(46). Emphasis supplied.

<sup>10</sup> The Georgia Public Service Commission, following a recommendation from a committee that had been assembled to study the question, determined that LRN was the preferred approach to LNP and concluded that LRN could be implemented by mid-1997, a date also supported by the Illinois Commission. Indeed, LNP task forces in a number of other states consistently have scored LRN highest in their technical evaluations.

<sup>11</sup> These include NYNEX, Bell Atlantic (Maryland), BellSouth, Ameritech, Time Warner, MFS, TCG, Sprint Centel, GTE (Illinois), US West, AT&T, AirTouch, MediaOne, CCTA, Sprint, Cox and ELI.

these favorable assessments, major switch vendors have been cooperating to develop and implement the switch software required to accommodate LRN.<sup>12</sup>

And, any failure to implement number portability consistent with the clear, prevailing industry consensus would serve only to reward those who wish to delay the advent of effective local competition, namely, incumbent local carriers whose monopoly strongholds would continue unaffected by those seeking to compete against them. The available alternatives to LRN simply are not an acceptable means to achieve the new law's goals and objectives, as they are costly and inefficient and, indeed, increase significantly barriers to entry to those seeking to compete in the local marketplace.<sup>13</sup>

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<sup>12</sup> Initial switch requirement assessments were completed this past November, and the necessary software is currently scheduled to be available by mid-1997.

<sup>13</sup> For example, Remote Call Forwarding (RCF) and Direct Inward Dialing (DID) are "interim measures" being proposed by some incumbent local carriers to achieve less-than-complete number portability.

RCF merely redirects a telephone call from one carrier to another for completion by translating the dialed telephone number into one that the receiving carrier can recognize. The hand-off is intended to be "transparent" to the caller. With DID, the call is routed to a carrier switch designated by the NXX of the dialed telephone number. (Unlike RCF, the original service provider does not translate the dialed number but routes the call to the number over a dedicated facility to the new service provider's switch.)

Both these approaches are deficient because they were designed to provide services and capabilities completely unrelated to provider portability. Moreover, both require that calls be routed through the incumbent local carrier's switch and thus there remains a dependency that is totally foreign to the concept of effective competition.

Perhaps more significant, both degrade transmission quality,

The Commission promptly should establish a future date certain for implementation of a permanent LNP solution, as it did, successfully, in connection with the implementation of 800 number portability, and that date should be one toward which the industry moves without further delay. MCI urges that the date be set no later than September 1, 1997. That such date is entirely feasible has been proven in state workshops, e.g., Georgia and Illinois, because it is reasonably anticipated that switch software will be generally available by June 1997, with SMS operation even being available earlier -- during the first quarter of 1997. Significant work efforts already have been undertaken in

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making them unsuitable for data transmissions, increase call set-up time, result in increased call blocking, cause a loss of Custom Local Area Signalling Service (CLASS) features, and exhaust of NANP resources because of the necessary involvement of two telephone numbers. They also impair 911 and Enhanced 911 compatibility due to the two-number requirement, and they adversely impact the ability of competing carriers to provide operator services.

Additionally, these approaches impose uneconomic trunking requirements on competitors, and they limit the ability to make simultaneous calls to the same individual number, which would be needed by large customers. They complicate reconciliation of customer complaints because they involve two numbers and two networks, and there is a clear potential for customer confusion because end-user bills may reflect charges imposed by the incumbent local carrier when service is actually being provided by another. They also affect the standard recording equipment used for customer billing. And, because interstate calls involving these approaches must pass through an incumbent local carrier's network, that carrier, not the competing carrier, would recover interstate access charges from interexchange carriers under the existing access regime.

Finally, RCF, an inferior approach by any measure, is no bargain. MCI estimates, conservatively, that, for incumbent local carriers, the "cross-over point" -- the time-point at which RCF would require a greater cumulative investment than LRN -- is reached in only two to three years.

other key areas, including network operations, operator services, and rating and billing, and this should lend favorably to an early and successful implementation.

In view of the foregoing, MCI submits that LRN is the only permanent LNP solution that has received the broad industry support essential to guaranteeing its successful availability at the earliest possible time.

Interim Portability Measures Are Plainly Problematic

To achieve the goals of the new law, it is essential that the Commission eliminate any incumbent local carrier incentives to delay the implementation of LRN, which they likely will attempt to do in order to maximize their revenue potential. This maximization effort involves maintaining for as long as possible revenue streams from high-priced "bottleneck" RCF and DID, which would allow the incumbent local carriers to try to retain access revenues for calls made to competitive local exchange carriers or CLECs. This result, in turn, effectively would insulate the incumbent local carriers from virtually all meaningful access competition.<sup>14</sup>

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<sup>14</sup> It is expected that, absent positive state action, e.g., Michigan, or completion of successful negotiations, incumbent carriers will attempt to retain, rather than pass through to CLECs, all access revenues associated with calls to CLECs that first must go through the carrier for RCF or DID routing. In any event, the incumbent carriers are not entitled to retain access charges, as they would be fully compensated by obtaining TSLRIC during the interim period. Indeed, MCI submits, it isn't even a question of whether the incumbent carriers should "share" access revenues with CLECs; rather, the question should be whether CLECs should be required at all to share with the incumbent carriers.

To counter these financial incentives, the Commission must require competitively neutral pricing for RCF and for DID. That it is empowered to do so is apparent as the Commission, under Section 251(e) of the new law, has been given express authority over "[t]he cost of establishing ... number portability ... on a competitively neutral basis ...."<sup>15</sup> In this regard, the Commission should prohibit incumbent local carriers from keeping any access revenues, which would not even be involved with "true" LNP.<sup>16</sup> Alternatively, it should require steep discounting that recognizes the inherent deficiencies in the transitional RCF approach -- just as inferior "ENFIA" were made available to interexchange carriers in the pre-equal access era.

Finally, any LNP approach that is not competitively neutral must not be tolerated. Thus, "Release-To-Pivot" (RTP) and its ugly sibling, "Query-On-Release" (QOR), as well as other anti-competitive routing schemes that do not

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<sup>15</sup> Any failure on the part of the Commission to interpret "competitively neutral" to cover interim portability measures, as well as those which look toward a permanent resolution of the issue, would frustrate competitive entry and the rapid availability of "true" LNP. Section 4(i) of the Communications Act, 47 U.S.C. § 154(i), amply empowers the Commission to implement interim portability measures consistent with its statutory goal of introducing competition into local markets at the earliest opportunity. ("The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions.")

<sup>16</sup> In Illinois, parties were able to agree in principle on the provision of access revenues to CLECs, which means the concept lends itself easily to broader application.



treat all calls the same, must be summarily rejected, and no effort should be wasted in pursuing them.<sup>17</sup> Indeed, "competitive neutrality" can only exist when ported and non-ported numbers are treated identically with regard to calls made to them; and neither RTP nor QOR operates in this fashion. These schemes simply force CLECs to remain dependent on the incumbent local carriers, which result never cannot be found optimal to the goal of creating a competitive marketplace. Furthermore, these schemes would delay the advent of "true" LNP, provide no assurances of transparency to end-users and defeat location and service portability.

In view of the above, the FCC should act promptly -- consistent with its obligations under the new law -- to implement an LNP solution by performing the following:

- Require and prescribe competitively neutral pricing for RCF and DID on an interim basis, which means, potentially, at substantial discount
- Prohibit incumbent carriers from keeping any access revenues associated with RCF or DID calls
- Adopt LRN -- a database solution -- and apply it via a neutral third party administrator
- Establish September 1, 1997 as the deadline by which nationwide LRN must be made available
- Create relevant reporting milestones for tracking LRN implementation progress

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<sup>17</sup> The deficiencies of RTP and QOR, respectively, are addressed in Attachments A and B, which were prepared by Yatendra K. Pathak, MCI.

-- Establish penalties for any incumbent local carrier delays beyond September 1, 1997

-- Foreclose incumbent local carriers from subjecting calls to ported numbers to any routing schemes that are less direct than those used by the carrier with its own non-ported calls

If the Commission acts in accord with these recommendations, it will fulfill the intent of the new law which, essentially, is to introduce into the local telecommunications marketplace effective competition at the earliest opportunity. If it does not do so, and the result is delay in removing inequities between incumbent local carriers and CLECs seeking to compete in terms of number portability -- in other words, negating the advantages that the current monopolists enjoy in the numbering arena -- the objectives of the new law will be frustrated.

Conclusion

For the reasons explained above, the new law fully empowers the Commission to achieve local number portability at the earliest opportunity, thereby making possible the introduction of competitive forces into local markets.

Respectfully submitted,

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Its Attorney

## **ATTACHMENT A**

# **ISSUES WITH RELEASE-TO-PIVOT (RTP) APPROACH FOR LOCAL NUMBER PORTABILITY (LNP)**

**Yatendra K. Pathak**  
Technical Standards Management

## **1. INTRODUCTION**

This paper identifies a number of issues associated with the Release-To-Pivot (RTP) approach to provide Local Number Portability (LNP) in a competitive LEC environment. The conclusion is that RTP is not a viable solution for LNP, and the industry should oppose the implementation of RTP in the local networks. Especially, RTP approach is in the interests of the Competitive LECs (CLECs) and IXC's.

## **2. RTP DEFINITION**

The RTP approach to LNP forces the originating network to route call to a ported number to the incumbent LEC's network, possibly through one or more transit networks. The incumbent LEC determines the routing information to route the call to the new local service provider (CLEC). The routing information is then sent back in a call release message to an *RTP-Capable*, the originating or a transit, network involved in the call setup. The *RTP-Capable* network uses this routing information to route the call to CLEC.

## **3. ISSUES WITH RTP**

The RTP capability has been conceived on the assumption that, in the early years of competition, most telephone numbers will not be ported; therefore, there is no need to initiate the LNP query to determine the routing information since majority of the calls will continue to be terminated in the incumbent LECs' networks. The proponents of RTP claim that RTP thus minimizes the LNP query load in the SS7 networks.

This paper analyzes RTP from a broader perspective, and reaches the conclusion that there are several issues associated with the RTP capability which make it a non-viable approach for implementation. These issues are discussed in the following categories:

- Competitive Aspects
- Complexity
- Cost
- Regulatory Aspects

### **3.1 Competitive Aspects**

Following is a list of the undesirable aspects of RTP which put the CLECs at a competitive disadvantage in relation with the incumbent LEC:

- ⇒ As a competitive local service provider, CLECs' major concern is that the ported and non-porting numbers do not get identical treatment under the RTP scenario. The call setup to the ported numbers will encounter additional delay since RTP requires that all calls should be first routed to the incumbent LEC to get the routing information. The calls to the non-porting numbers will not require additional RTP messaging and switch processing since they terminate on the incumbent LEC's network. The additional delay may not be perceptible to the calling user, but may be used as a marketing ploy by the incumbent LEC to discourage customers from porting their numbers.
- ⇒ Another undesired consequence of RTP is the continued reliance of other networks on incumbent LEC to get the routing information regardless of the number of times a customer has ported his number. A network breakdown or a degraded quality of service in the incumbent's network will risk calls to the customers which have ported to a competitor, i.e., a CLEC. Obviously, there is sufficient incentive for the incumbent LEC to abuse this power.
- ⇒ An incumbent LEC implementing RTP will not perform the LNP query on the originating calls to the customers ported to a CLEC. As a result, these calls will always be sent to the CLEC1 which owns the NPA-NXX even if the customer has ported to another CLEC2. This will force the CLEC1 to either implement RTP with the incumbent LEC or perform an LNP query even after the number has been ported to CLEC2. The CLEC1 will unnecessarily stay involved in the call which is obviously an inefficient and competitively disadvantageous solution for CLEC2.
- ⇒ The LECs promoting RTP have not made it clear how they intend to derive the routing information. If they choose not to participate in a third party centralized database (SMS) then there is a possibility that their switch based translation may become out of synch with the SMS. This will lead to incorrect routing of LNP calls not only by such LECs, but also by other providers who will perform LNP query and make use of SMS. Again, this is not in the best interest of CLECs.

### **3.2 Complexity**

The RTP to support LNP is a complex feature which will build on a generic RTP network capability not available in the networks today. The development of RTP will be over and above the basic LNP call termination capability required by the LRN type solution. The RTP standards are not yet mature, and are still under discussion in ANSI and ITU. Due to the complexity, ITU has left it for further study how RTP capability will interact with other basic and supplementary services. Therefore, the initial implementation of such RTP interactions will be vendor specific thus leading to potential interworking problems between different vendor switches within one or more networks. The complexity also arises when multiple switches in a network(s) are

**RTP-Capable.** It is not clear which switch takes precedence to handle the RTP call. It becomes even more complex when one considers the fact that RTP is a generic capability which can be utilized not only by LNP but also by other features.

### **3.3 Cost**

It is clear that the added complexity of RTP will cost more in the switch development. This increased cost will be over and above what is required for the basic LNP call termination capability. If there is no clean way of optioning out the RTP capability in the switches, even the networks who do not support RTP will end up sharing the increased cost. The RTP capability will also increase cost by requiring extra trunking between the incumbent and other networks which otherwise wouldn't have been needed. The incumbent LECs will also charge for the RTP processing in their networks which will be required for the LNP calls. Ultimately, it will be the CLECs and/or customers who will end up paying more thus discouraging the number portability.

It may be worthwhile to point out here that the LECs' argument that RTP will reduce the cost by minimizing SS7 query load does not have much merit. Most of LNP cost will be incurred in upgrading infrastructure, including switch generic, database, etc. It has been stated in some PUC meetings that only 10% of the cost will be to add extra SS7 capacity required for the LNP queries. Moreover, as the LNP penetration increases, it will become increasingly more economical to perform the LNP queries instead of RTP to derive the routing information.

### **4.4 Regulatory Aspects**

Many state PUCs have already declared the LRN type solutions as the preferred way of implementing LNP. Almost all switch vendors are targeting 1997 for the LRN availability, whereas, it is not clear if the RTP will be available in the near future. In FCC's view, the number portability should evolve from service provider portability to location portability in the future. In fact, some states, e.g., Washington, are seriously considering location portability. The RTP approach is completely useless for location portability since an LNP query should occur as early as possible to determine the final destination.

## **5. CONCLUSION**

In light of the issues presented in this paper, it would seem appropriate for the industry to focus only on one viable solution, i.e., LRN database oriented approach which is already becoming a de-facto industry standard. The RTP solution is not only competitively biased against CLECs and IXC's, but is also not a viable solution for evolution to the long term goal of location portability. Further, multiple solutions will simply increase the LNP implementation cost which will be ultimately passed on to the customer thus discouraging number portability.

## **ATTACHMENT B**

# **ISSUES WITH QUERY-ON-RELEASE (QOR) APPROACH FOR LOCAL NUMBER PORTABILITY (LNP)**

**Yatendra K. Pathak**  
**Technical Standards Management**

## **1. QOR DEFINITION**

The QOR approach to LNP requires the originating network to route all call to the incumbent LEC network, possibly through one or more transit networks. If the number is not ported, the incumbent LEC will terminate the call normally. But if the number is ported, the call will be released back to the originating network which will then determine the routing number either by querying the LNP database (or by some network specific measures) and route the call to the new local service provider (CLEC). The basic difference between the QOR and the RTP approach is that with the QOR approach, the originating network will determine the routing number, whereas, with RTP, the incumbent LEC determines the routing number. Similar to Release-to-Pivot (RTP), the Query-on-Release (QOR) approach for LNP also has a number of issues associated with it in a competitive LEC environment. MCI should oppose QOR as a long term solution to LNP for the following reasons.

## **2. ISSUES WITH QOR**

Similar to RTP, the QOR capability has also been conceived on the assumption that, in the early years of competition, most telephone numbers will not be ported; therefore, there is no need for the originating networks to initiate the LNP query for the ported NPA-NXXs since majority of the calls will continue to be terminated in the incumbent LECs' networks. The claim is that QOR will minimize the SS7 LNP query load in the incumbent LEC networks.

This paper analyzes QOR from a broader perspective, and reaches the conclusion that there are several issues associated with the QOR capability which make QOR a non-viable long term approach for LNP implementation. These issues are discussed in the following categories:

- Competitive Aspects
- Cost and Complexity
- Regulatory Aspects



### **3.1 Competitive Aspects**

Following is a list of the undesirable aspects of QOR which put the CLECs at a competitive disadvantage in relation with the incumbent LEC:

- ⇒ As a competitive local service provider, CLECs' major concern is that the ported and non-porting numbers do not get identical treatment under the QOR scenario. The call setup to the ported numbers will encounter additional delay since these calls will be first routed to the incumbent LEC, released back to the originating network, and then routed to the CLEC. The calls to the non-porting numbers will not require additional QOR messaging and switch processing since these calls terminate on the incumbent LEC's network. The additional delay may not be perceptible to the calling user, but may be used as a marketing ploy by the incumbent LEC to discourage customers from porting their numbers.
- ⇒ Another undesired consequence of QOR is the continued reliance of other networks on the incumbent LEC regardless of the number of times a customer has ported his number. A network breakdown or a degraded quality of service in the incumbent's network will risk calls to the customers which have ported to a competitor, i.e., a CLEC. Obviously, there is sufficient incentive for the incumbent LEC to abuse this power.
- ⇒ An incumbent LEC implementing QOR will not perform the LNP query on the originating calls to the customers ported to a CLEC. As a result, these calls will always be sent to the CLEC1 which owns the NPA-NXX even if the customer has ported to another CLEC2. This will force the CLEC1 to either implement QOR with the incumbent LEC or perform an LNP query even after the number has been ported to CLEC2. The CLEC1 will unnecessarily stay involved in the call which is obviously an inefficient and competitively disadvantageous solution for CLEC2.

### **3.2 Cost and Complexity**

The standards for QOR are still evolving. The QOR implementation does not exist in the networks today, and will require extra development over and above what is required by the LRN solution. If there is no clean way of optioning out the QOR capability in the switches, even the networks which do not support QOR will end up sharing the increased development cost. The QOR capability will also increase cost by requiring extra trunking between the incumbent LEC and other networks which otherwise wouldn't have been needed. Other networks will also have to keep paying access charges to the incumbent LECs for the calls to the numbers which have been ported to the CLECs. Ultimately, it will be the CLECs and/or the rate-payers who will end up paying for this increased cost thus discouraging the number portability.

It should also be noted that the SS7 connectivity is required between the networks for the QOR capability to function. While many of the incumbent LECs have SS7 within their networks, the same assumption can not be made for the smaller CLECs. Another factor to consider is the increased provisioning complexity when networks have more than one options, i.e., LRN and

**QOR, to implement LNP. Unless very carefully provisioned, the interaction between the two options can result into the misrouted or lost calls in a multi-network environment of today.**

**It may be worthwhile to point out here that the argument that the QOR (and RTP) solutions will reduce the cost by minimizing SS7 query load does not have much merit. Most of LNP cost will be incurred in upgrading infrastructure, including switch generic, database, etc. It has been stated in some PUC meetings that only 10% of the cost will be to add extra SS7 capacity required for the LNP queries. Moreover, as the LNP penetration increases, it will become increasingly more economical to perform the LNP queries on every number in the ported NPA-NXX instead of performing query only when the call is released by the incumbent LEC, i.e., QOR.**

### **3.4 Regulatory Aspects**

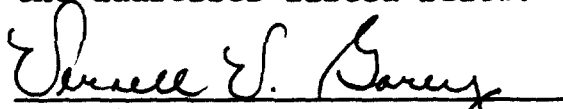
**Many state PUCs have already declared the LRN type solutions as the preferred way of implementing LNP. Almost all switch vendors are targeting 1997 for the LRN availability, whereas, it is not clear if the LRN will be available in the near future. In FCC's view, the number portability should evolve from service provider portability to location portability in the future. In fact, some states, e.g., Washington, are seriously considering location portability. In case of location portability, the database query should occur as early as possible in the call set up to determine the final destination. The QOR approach goes totally against this philosophy, and can not be used for the long term goal of location portability.**

## **5. CONCLUSION**

**In light of the issues presented in this paper, it would seem appropriate for the industry to focus only on one viable solution, i.e., LRN database oriented approach which is already becoming a de-facto industry standard. The QOR (and RTP) solution are not only competitively biased against CLECs and IXC's, but are also not a viable solution for evolution to the long term goal of location portability. Further, multiple solutions will simply increase the LNP implementation cost which will be ultimately passed on to the customer thus discouraging number portability.**

**CERTIFICATE OF SERVICE**

I, Vernell V. Garey hereby certify that the foregoing "MCI COMMENTS", CC Docket No. 95-116 was served this 29th day of March, 1996, by mailing true copies thereof, postage prepaid, to the following persons at the addresses listed below:

  
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